

Amendments to the Claims

Claim 1 (currently amended) A semiconductor component, comprising:

a semiconductor substrate;

an insulation layer on said semiconductor substrate, said insulating layer having a thickness of between 50 nm and .200 nm;

a semiconductor layer configured on said insulation layer;

*b* a first doped terminal zone and a second doped terminal zone formed in said semiconductor layer; and

a drift zone formed in said semiconductor layer;

said drift zone formed between said first doped terminal zone and said second doped terminal zone, said drift zone including a plurality of complementary doped adjacent sections; and

at least one of said first doped terminal zone and said second doped terminal zone directly adjoining said semiconductor substrate.

Claim 2 (original) The semiconductor component according to claim 1, wherein said first terminal zone and said second terminal zone reach through said insulation layer into said substrate.

Claim 3 (original) The semiconductor component according to claim 2, wherein said first terminal zone and said second terminal zone are doped complementary with respect to said semiconductor substrate.

Claim 4 (original) The semiconductor component according to claim 1, wherein said second terminal zone is of a complementary conduction type with respect to said first terminal zone.

Claim 5 (original) The semiconductor component according to claim 1, comprising:

a depletion zone configured between said second terminal zone and said drift zone;

said depletion zone having a conduction type; and

said first terminal zone and said second terminal zone having a conduction type that is complementary to said conduction type of said depletion zone.

Claim 6 (original) The semiconductor component according to  
claim 1, wherein:

said first terminal zone has a conduction type; and

said drift zone has a conduction type that is equivalent to  
the conduction type of said first terminal zone.

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✓ Claim 7 (cancelled)

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Claim 8 (currently amended) The semiconductor component  
according to claim 7 5, wherein:

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said plurality of said complementary doped adjacent sections  
includes first sections and second sections;

said first sections and said first terminal zone are of a  
first conduction type;

said first sections are connected to said first terminal zone;

said second sections and said depletion zone are of a second  
conduction type complementary to said first conduction type;  
and

said second sections are connected to said depletion zone.

Claim 9 (currently amended) The semiconductor component according to claim 7 1, wherein:

said plurality of said complementary doped adjacent sections includes first sections and second sections;

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*cont.* said first sections and said first terminal zone are of a first conduction type;

said first sections are connected to said first terminal zone;

said second sections and said second terminal zone are of a second conduction type complementary to said first conduction type; and

said second sections are connected to said second terminal zone.

Claim 10 (currently amended) The semiconductor component according to claim 7 1, wherein said plurality of said complementary doped adjacent sections run in a longitudinal direction between said first terminal zone and said second terminal zone.

Claim 11 (currently amended) The semiconductor component according to claim ~~10~~ 13, wherein:

    said plurality of said complementary doped adjacent sections includes first sections and second sections;

    said first sections and said first terminal zone are of a first conduction type;

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cont.*

    said first sections are connected to said first terminal zone;

    said second sections and said depletion zone are of a second conduction type complementary to said first conduction type; and

    said second sections are connected to said depletion zone.

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Claim 12 (original) The semiconductor component according to claim 10, wherein:

    said plurality of said complementary doped adjacent sections includes first sections and second sections;

    said first sections and said first terminal zone are of a first conduction type;

said first sections are connected to said first terminal zone;

said second sections and said second terminal zone are of a second conduction type complementary to said first conduction type; and

said second sections are connected to said second terminal zone.

Claim 13 (original) The semiconductor component according to claim 10, comprising:

a depletion zone configured between said second terminal zone and said drift zone;

said plurality of said complementary doped adjacent sections running between said first terminal zone and said depletion zone.

Claim 14 (original) The semiconductor component according to claim 1, wherein:

said semiconductor substrate is p-doped; and

the one of said first doped terminal zone and said second doped terminal zone that directly adjoins said semiconductor substrate is n-doped.

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